Paper No. 13

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte THOMAS W. BAEHLER

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Appeal No. 97-3071
Application 08/484,729[1]

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ON BRIEF

_____

Before CALVERT, MEISTER and ABRAMS, ***Administrative Patent Judges***.

MEISTER, ***Administrative Patent Judge***.

DECISION ON APPEAL

Thomas W. Baehler (the appellant) appeals from the final rejection of claims 1-13 and 15, the only claims remaining in the application.

[1] Application for patent filed June 7, 1995.

We REVERSE and, pursuant to our authority under 37 CFR § 1.196(b), enter new rejections of the appealed claims under 35 U.S.C. § 112, first and second paragraphs.

The appellant's invention pertains to (1) a piston, (2) a cylinder block assembly and (3) a method for reducing wear on a piston bore surface. Independent claims 1, 8 and 15 are further illustrative of the appealed subject matter and copies thereof may be found in the appendix to the brief.

The reference relied on by the examiner is:

Fryklund 3,592,105 July 13, 1971

Claims 1-13 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fryklund.

We have carefully considered the subject matter defined by these claims. However, for reasons stated ***infra*** in our new rejections entered under the provisions of 37 CFR § 1.196(b), considerable speculations are necessary to determine how to make and use the invention defined by these claims, and to determine what in fact is being claimed. Since a rejection on

prior art cannot be based on speculations and assumptions (***see In re Steele***, 305 F.2d 859, 862-63, 134 USPQ 292, 295-96 (CCPA 1962) and ***In re Wilson***, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)), we are constrained to reverse the examiner's rejections of claims 1-13 and 15 under 35 U.S.C. § 102(b). We hasten to add that this is a procedural reversal rather than one based upon the merits of the § 102(b) rejection.

Under the provisions of 37 CFR § 1.196(b) we make the following new rejections:

Claims 1-13 and 15 are rejected under 35 U.S.C. 112, first paragraph, as being based on a non-enabling disclosure. We initially observe that the test regarding enablement is whether the disclosure, as filed, is sufficiently complete to enable one of ordinary skill in the art to make and use the claimed invention without undue experimentation. ***In re Wands***, 858 F.2d 731, 737 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) and ***In re Scarbrough***, 500 F.2d 560, 566, 182 USPQ 298, 302 (CCPA 1974). The experimentation required, in addition to not being undue, must not require ingenuity beyond that expected of one of ordinary skill in the art. ***See In re Angstadt***, 537 F.2d

498, 504, 190 USPQ 214, 218 (CCPA 1976).

Here, the appellant in the specification states that, in order to reduce wear on the piston bore surface (i.e., the surface of the bore or cylinder in which the piston reciprocates), the piston should be provided with an "extended curvature" having a radius which is of "sufficient" magnitude to provide "continuous, tangential cooperation" between the extended curvature and the surface of the bore in which it reciprocates (see, e.g., page 13, lines 6-12; page 14, lines 11-17). These portions of the specification also state that the "extended curvature" may be only on an extreme end portion or continue the entire length of the piston. Page 13 of the specification also states that

> The continuous, tangential cooperation is preferably of a conjugate nature, such that a rolling motion occurs between the piston 38 and the piston bore surface 32, as opposed to a sliding, discontinuous, non-uniform motion. This cooperation reduces wear on the piston bore surface 32 of the cylinder block 14, by reducing the Hertzian or contact stresses present from the "cocked" position of the piston 38 within the piston bore 26, as the piston 38 reciprocates and simultaneously rotates within the piston bore 26 of the cylinder block 14. While the instant invention contemplates a range of radial dimensions to achieve the desired wear reduction function, a radius R in the range of

> approximately 60" to 80" is preferred. [Lines 12-24.]

The problem is, however, that the specification does not provide any meaningful guidance in selecting parameters (e.g., what is the extent of an “extended” curvature, relative to other curvatures such as a simply “rounding” of the corner of the piston, and what radius of curvature, relative to the other dimensions of the piston, is “sufficient”) which would yield the claimed result. This problem is exemplified by the fact that, according to the appellant, neither “rounding” the corner of the piston (see specification, page 14, lines 7-9) nor the arrangement of Fryklund (which appears to have an extended curvature similar to that described in lines 10-17 of the specification) will perform the function in question. It thus appears that only very particular parameters will do. However, no guidance has been provided for selecting these particular parameters, and it does not appear from the record that there

are any established criteria or techniques for making such a selection that the artisan would be aware of. While page 13 of the specification does state that “a radius R in the range

of approximately 60" to 80" is preferred," this information, without knowing the piston size (i.e., the diameter and length) would appear to be of little value. From our perspective, the appellant's disclosure is merely an invitation to experiment, rather than an explanation to the skilled artisan as to how to make and use the claimed invention.

Claims 1-13 and 15 are rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the appellant regards as the invention. Independent claims 1, 8 and 15 are drafted in either a means or step plus function format as provided for in paragraph 6 of § 112 which means or step, according to that provision, will be "construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." Failure to describe adequately the necessary structure, material, or acts in the written description means that the drafter has failed to comply with the mandate of the second paragraph of § 112. ***In re Dossel***, 115 F.3d 942, 946, 42 USPQ2d 1881, 1884

(Fed. Cir. 1997) and ***In re Donaldson***, 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994). Here, we are of the opinion that the appellant has failed to adequately describe the necessary structure and acts for the reason we have stated above with respect to the rejection of these claims under the first paragraph of § 112 and, for this reason, claims 1-6, 8-13 and 15 fail to comply with the requirements of the second paragraph of
§ 112.

With respect to claim 7 (which is not drafted in a means or step plus function format), we observe that the purpose of the second paragraph of § 112 is to provide those who would endeavor, in future enterprises, to approach the area circumscribed by the claims of a patent, with adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance. ***In re Hammack***,
427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970). Moreover, no claim may be read apart from and independent of the

supporting disclosure on which it is based. ***See In re Cohn***, 438 F.2d 989, 993, 169 USPQ 95, 98 (CCPA 1971).

Applying these principles to the present case, we are of the opinion that the recitation of an "extended curvature" introduces uncertainty into the claim which would preclude one skilled in the art from determining the metes and bounds of the claimed subject matter. As we have noted above in the rejection under the first paragraph of § 112, the appellant's specification fails to provide any meaningful guidance as to what the extent of an "extended" curvature is and what radius of curvature, relative to the other dimensions of the piston, is "sufficient" to yield the claimed result. Thus, when read in light of the specification, one undertaking in future enterprises would be at a loss to know what structure was intended to be encompassed by an "extended curvature."

In summary:

The rejection of claims 1-13 and 15 under 35 U.S.C. § 102(b) is reversed.

New rejections of claims 1-13 and 15 under 35 U.S.C. §

112, first and second paragraphs, has been made.

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, ***WITHIN TWO MONTHS FROM THE DATE OF THE DECISION***, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
>
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR

§ 1.136(a).

REVERSED
37 CFR § 1.196(b)

Ian A. Calvert Administrative Patent Judge	)	
James M. Meister Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
Neal E. Abrams Administrative Patent Judge	)	

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